

Amendment Under 37 C.F.R. § 1.111
US Appl. 10/046,154

Atty. Docket: Q67889

REMARKS

Claims 1-3 and 11-14 are all the claims pending in the application. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Information Disclosure Statement (IDS)

On January 16, 2002, Applicants timely submitted an IDS. In the August 14 Office Action, the Examiner returned a copy of the PTO 1449 submitted with the January 16 IDS, but did not initial (or cross through) the two cited references in the section entitled "Other Prior Art Documents". Accordingly, Applicants respectfully request that the Examiner initial next to the two "Other Prior Art Documents", and return another copy of the PTO 1449 submitted with the January 16 IDS.

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected claims 1-3 and 11-14 under §112, 2nd paragraph, as indefinite. Applicants have amended the claims in a manner believed to overcome this rejection.

Claim Rejections - 35 U.S.C. § 101

The Examiner rejected claims 1 and 13 under §101 because, allegedly, they claimed recitation of a use, without setting forth any steps involved in the process, resulting in an improper definition of the process. Applicants have amended claims 1 and 13 in a manner believed to overcome this rejection.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 1-3 and 11-14 under §103(a) as being unpatentable over US Patent 3,699,724 to Ellis et al. (hereinafter Ellis). Applicants respectfully traverse this rejection because Ellis fails to teach or suggest all the elements as set forth in the claims.

Ellis discloses a multi-surface machining method for simultaneously machining the center bore of a gear workpiece 15 and one or both of the flat end faces of the gear workpiece (see enclosed Exhibit A, which is mark-up of Ellis' Fig. 3). Ellis furthermore discloses fixing

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the workpiece on the surface comprising the gearing (see for example Figures 3 and 6, and column 2, lines 5 to 17). This fixing is called centerless fixing, because the workpiece is not hold in the middle but, instead, on its gearing surface between two master gears 16, 17.

Ellis does not, therefore, disclose a method as set forth in claim 1. Specifically, Ellis does not disclose the process steps of:

- fixing said workpiece on a second surface, this second surface not requiring hard machining, i.e., not being the surface with the gearing which is machined; and
- machining or grinding said gearing according to a continuously working generating grinding or machining process and, at the same time and in the same fixing, machining said boring.

Also, the teachings of Ellis would not lead a person skilled in the art to the invention as claimed. Ellis discloses, in column 6, lines 22 to 26, that the machine is adapted to improve the surface finish characteristics of the tooth flanks of the gear teeth on a gear workpiece simultaneously with the boring and facing operations. However, Ellis only teaches that the surface of the gearing can be finished (see column 6, line 24). Such a finishing procedure can not be compared with a machining or grinding procedure. A machining or grinding procedure is a cutting or chip removing process. A finishing procedure is not such a process, but is only a rolling process, which does not change the outer diameter of the workpiece anymore. This is the reason why the workpiece can be fixed on the surface bearing the gearing. However, the gearing itself must already exist, otherwise, the master gears can not mesh with the gearing and, therefore, can not hold the workpiece with sufficient accuracy. Therefore, the gearing according to Ellis has to be machined with high accuracy before the boring is honed.

A person skilled in the art would not, therefore, apply Ellis' teaching related to a finishing procedure to machining or grinding procedures, especially since the fixing disclosed in Ellis can not be used. Furthermore, a person skilled in the art would not have tried, in view of Ellis, to machine or grind the gearing at the same time as the boring.

Accordingly, Ellis does not teach or suggest a process as set forth in claims 1 and 13 of the pending application, i.e., it does not teach or suggest machining or grinding the gearing and machining the boring at the same time and in the same fixing.

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For at least any of the above reasons, Ellis fails to render obvious claims 1 and 13. Likewise, this reference fails to render obvious dependent claims 2, 3, 11, 12, and 14..

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 14, 2003

3,699,724

PATENTED OCT 24 1972

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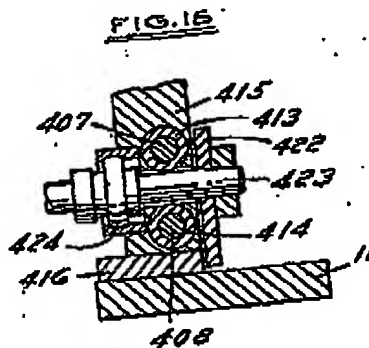
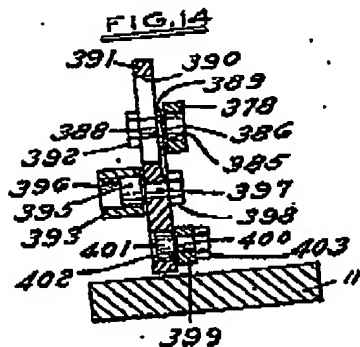
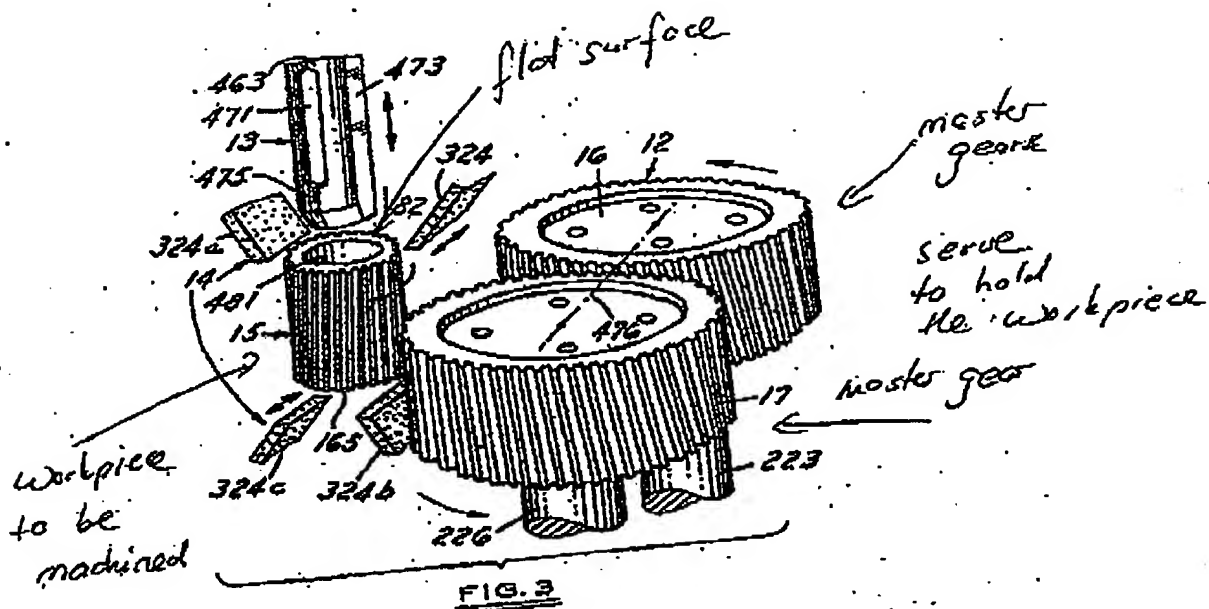


EXHIBIT A

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